#### § 75.1100-3

installed in entries adjacent to the conveyor entry belt as long as the outlets project into the belt conveyor entry.

- (c) Haulage tracks. (1) In mines producing 300 tons of coal or more per shift waterlines shall be installed parallel to all haulage tracks using mechanized equipment in the track or adjacent entry and shall extend to the loading point of each working section. Waterlines shall be equipped with outlet valves at intervals of not more than 500 feet, and 500 feet of firehose with fittings suitable for connection with such waterlines shall be provided at strategic locations. Two portable water cars, readily available, may be used in lieu of waterlines prescribed under this paragraph.
- (2) In mines producing less than 300 tons of coal per shift, there shall be provided at 500-foot intervals in all main and secondary haulage roads:
- (i) A tank of water of at least 55-gallon capacity with at least 3 pails of not less than 10-quart capacity; or
- (ii) Not less than 240 pounds of bagged rock dust.
- (d) Transportation. Each track or off-track locomotive, self-propelled mantrip car, or personnel carrier shall be equipped with one portable fire extinguisher.
- (e) Electrical installations. At each electrical installation, the operator shall provide two portable fire extinguishers that have a nominal capacity of 5 pounds of dry chemical, or one extinguisher that has a nominal capacity of at least 10 pounds of dry chemical, and which have a 2-A:10-B:C or higher rating.
- (f) Oil storage stations. Two portable fire extinguishers and 240 pounds of rock dust, shall be provided at each permanent underground oil storage station. One portable fire extinguisher shall be provided at each working section where 25 gallons or more of oil are stored in addition to extinguishers required under paragraph (a) of this section.
- (g) Welding, cutting, soldering. One portable fire extinguisher or 240 pounds of rock dust shall be provided at locations where welding, cutting, or soldering with arc or flame is being done.
- (h) Powerlines. At each wooden door through which powerlines pass there

shall be one portable fire extinguisher or 240 pounds of rock dust within 25 feet of the door on the intake air side.

(i) Emergency materials. (1) At each mine producing 300 tons of coal or more per shift there shall be readily available the following materials at locations not exceeding 2 miles from each working section:

1,000 board feet of brattice boards

2 rolls of brattice cloth

2 hand saws

25~pounds of  $8^{\text{d}}$  nails

25 pounds of  $10^{\rm d}$  nails

25 pounds of 16d nails

3 claw hammers

25 bags of wood fiber plaster or 10 bags of cement (or equivalent material for stoppings)

5 tons of rock dust

(2) At each mine producing less than 300 tons of coal per shift the above materials shall be available at the mine, provided, however, that the emergency materials for one or more mines may be stored at a central warehouse or building supply company and such supply must be the equivalent of that required for all mines involved and within 1-hour's delivery time from each mine. This exception shall not apply where the active working sections are more than 2 miles from the surface.

[35 FR 17890, Nov. 20, 1970, as amended at 73 FR 53127, Sept. 15, 2008]

# § 75.1100-3 Condition and examination of firefighting equipment.

All firefighting equipment shall be maintained in a usable and operative condition. Chemical extinguishers shall be examined every 6 months and the date of the examination shall be written on a permanent tag attached to the extinguisher.

[35 FR 17890, Nov. 20, 1970, as amended at 60 FR 33723, June 29, 1995]

# § 75.1101 Deluge-type water sprays, foam generators; main and secondary belt-conveyor drives.

[STATUTORY PROVISIONS]

Deluge-type water sprays or foam generators automatically actuated by

#### Mine Safety and Health Admin., Labor

rise in temperature, or other no less effective means approved by the Secretary of controlling fire, shall be installed at main and secondary belt-convevor drives.

# 75.1101-1 Deluge-type water spray systems.

- (a) Deluge-type spray systems shall consist of open nozzles attached to branch lines. The branch lines shall be connected to a waterline through a control valve operated by a fire sensor. Actuation of the control valve shall cause water to flow into the branch lines and discharge from the nozzles.
- (b) Nozzles attached to the branch lines shall be full cone, corrosion resistant and provided with blow-off dust covers. The spray application rate shall not be less than 0.25 gallon per minute per square foot of the top surface of the top belt and the discharge shall be directed at both the upper and bottom surfaces of the top belt and to the upper surface of the bottom belt.

# § 75.1101-2 Installation of deluge-type sprays.

Deluge-type water spray systems shall provide protection for the belt drive and 50 feet of fire-resistant belt or 150 feet of nonfire-resistant belt adjacent to the belt drive.

#### §75.1101-3 Water requirements.

Deluge-type water spray systems shall be attached to a water supply. Water so supplied shall be free of excessive sediment and noncorrosive to the system Water pressure shall be maintained consistent with the pipe, fittings, valves, and nozzles at all times. Water systems shall include strainers with a flush-out connection and a manual shut-off valve. The water supply shall be adequate to provide flow for 10 minutes except that pressure tanks used as a source of water supply shall be of 1,000-gallon capacity for a fire-resistant belt and 3,000 gallons for a nonfire-resistant belt may be provided.

#### § 75.1101-4 Branch lines.

As a part of the deluge-type water spray system, two or more branch lines of nozzles shall be installed. The maximum distance between nozzles shall not exceed 8 feet.

## §75.1101-5 Installation of foam generator systems.

- (a) Foam generator systems shall be located so as to discharge foam to the belt drive, belt takeup, electrical controls, gear reducing unit and the conveyor belt.
- (b) Foam generator systems shall be equipped with a fire sensor which actuates the system, and each system shall be capable of producing and delivering the following amounts of foam within 5 minutes:
- (1) At fire-resistant belt installations, an amount which will fully envelop the belt drive, belt takeup, electrical controls, gear reducing unit, and the conveyor belt over a distance of 50 feet; and,
- (2) At nonfire-resistant belt installations, an amount which will fully envelop the belt drive, belt takeup electrical controls, gear reducing unit, and the conveyor belt over a distance of 150 feet.
- (c) The foam generator shall be equipped with a warning device designed to stop the belt drive when a fire occurs and all such warning devices shall be capable of giving both an audible and visual signal when actuated by fire.
- (d) Water, power, and chemicals required shall be adequate to maintain water or foam flow for no less than 25 minutes.
- (e) Water systems shall include strainers with a flush-out connection and a manual shut-off valve.

### §75.1101-6 Water sprinkler systems; general.

Water sprinkler systems may be installed to protect main and secondary belt-conveyor drives, however, where such systems are employed, they shall be installed and maintained in accordance with §§75.1101–7 through 75.1101–11.

# § 75.1101-7 Installation of water sprinkler systems; requirements.

(a) The fire-control components of each water sprinkler system shall be installed, as far as practicable in accordance with the recommendations set forth in National Fire Protection Association 1968-69 edition, Code No. 13, "Installation of Sprinkler Systems" and such systems' components shall be